

WHY USE A HEALTH AT EVERY SIZE APPROACH TO OBESITY PREVENTION?

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Critical Need for HAES Now!

- **Increasing rates of overweight and obesity**
- **Well-established failure of traditional approaches to weight loss**
- **Risk of physical and psychological damage associated with traditional approaches**
- **Improvements in health NOT dependent on weight loss**

“Do No Harm”

- **Ethical and moral health care professionals seek treatments that**
 - **Encourage personal autonomy**
 - **Help, not harm**
 - **Do not arbitrarily discriminate among persons or groups**
- **To succeed in treatment we need to turn the traditional weight paradigm around**

Failure of Traditional Paradigm

If the goal is to help
others towards
HEALTH, what has the
research shown?



Turning the Traditional Paradigm Around

- **OLD**

Losing weight is the only way to be healthy.

- **WHAT WE KNOW NOW**

Research has shown that large people can be fit and healthy by living a healthy lifestyle.

Diabetes Prevention Program

- **The Diabetes Prevention Program (DPP)** was a major clinical trial, or research study, aimed at discovering whether either diet and exercise or the oral diabetes drug metformin (Glucophage) could prevent or delay the onset of type 2 diabetes in people with impaired glucose tolerance (IGT).

Diabetes Prevention Program

- The DPP found that over the 3 years of the study, diet and exercise sharply reduced the chances that a person with IGT would develop diabetes.
- Metformin also reduced risk, although less dramatically.
- The DPP resolved these questions so quickly that, on the advice of an external monitoring board, the program was halted a year early.
- The researchers published their findings in the February 7, 2002, issue of the New England Journal of Medicine.



Dietary Approaches to Stop Hypertension

- **DASH followed 459 subjects, half women and over half African Americans, all of whom were being treated with medication for high blood pressure.**
- **Participants were taken off their medication and put on a nutritional program based upon 2,000 calories a day and consisting primarily of whole grains and grain products, vegetables, and fruits. Small amounts of low or nonfat dairy foods, meats, poultry or fish, and nuts were also included as food choices.**
- **The focus was on foods high in calcium, magnesium, and potassium.**

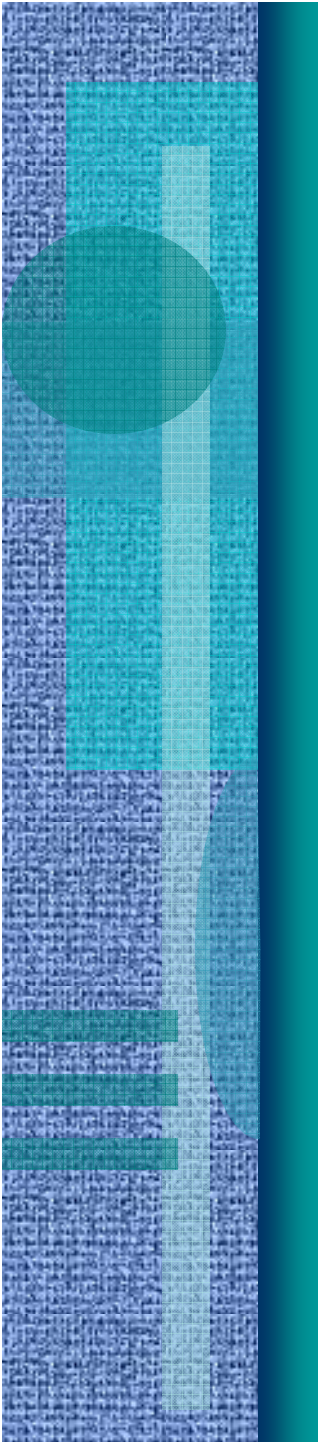
DASH

- The landmark Dietary Approaches to Stop Hypertension (DASH) study conducted by the National Institutes of Health and Prevention offered conclusive proof that those who eat a largely plant-based diet rich in whole grains, fruits, vegetables, and low fat or nonfat dairy products could control and even prevent high blood pressure.



Turning the Traditional Paradigm Around

- **OLD: Everyone “should” be thin.**
- **WHAT WE KNOW NOW**
Not so! Research has shown that genetics play an important role in body size. Some people are not meant to be thin.



**In the evolutionary history
of human beings, the ability
to store large amounts of
body fat was a genetic
advantage.**

Significant Role of Genetics

- **“Over 100 years’ worth of scientific research has demonstrated that heredity plays a major role in the development of body size and obesity.”**

Price. In Wadden and Stunkard (eds). Handbook of Obesity Treatment. The Guildford Press. 2002. (p. 73)

Role of Genetics (cont.)

- “The commonly held belief that obese individuals can ameliorate their condition by simply deciding to eat less and exercise more is at odds with compelling scientific evidence indicating that the propensity to obesity is, to a significant extent, genetically determined.” (p. 563)
 - Friedman. *Nature Med.* 2004;10:563-569.



Turning the Traditional Paradigm Around

- **OLD:** Large people can be permanently thin.
- **WHAT WE KNOW NOW**
Most people who lose weight gain it back.
Those who keep the weight off tend to have very restrictive diets and rigid exercise patterns.

How Effective is Dieting?

If the outcome is long-term, personal control over HEALTH, what has the research shown?

Dieting is Popular in the U.S.

◆ Percent of people dieting:

Women: 40%

Men: 25%

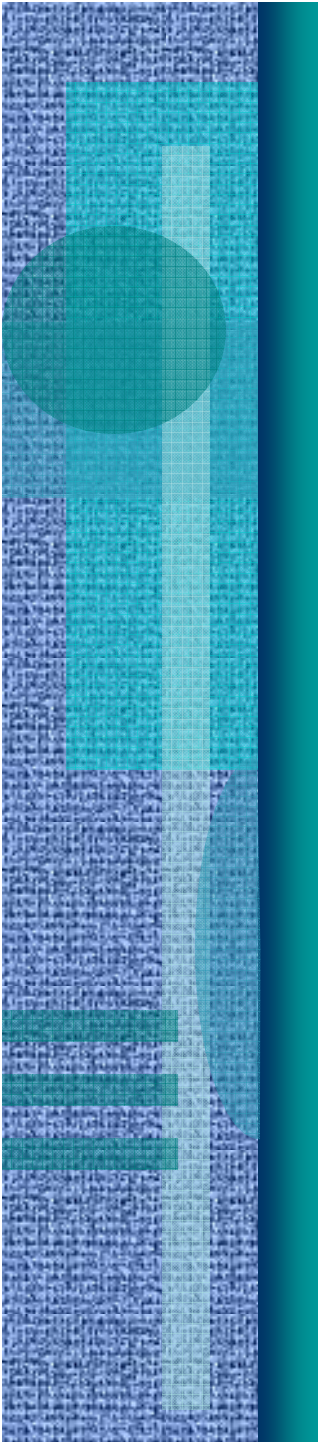
Teen girls: 62%

Teen boys: 28%

◆ Cost of dieting: over \$60 billion!

NEJM 338: 52-54, 1998

Health Risks of Weight Loss, 3rd Ed., 1995

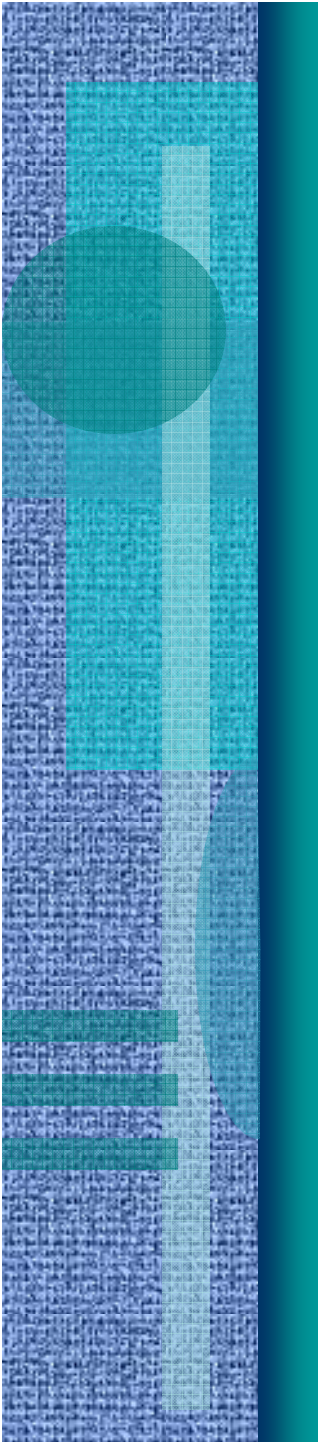


Long-Term Weight Loss Maintenance: Limited Success

- **Meta-analysis of long-term weight loss maintenance**
Anderson et al. *Am J Clin Nutr.* 2001;74:579-584.
- **29 studies met inclusion criteria:**
 - U.S. studies
 - Structured weight loss programs vs. self-help
 - Follow-up weights available for at least 2 years

Long-Term Weight Loss Maintenance (cont.)

- Weight loss programs used very-low-energy diets (VLED) and/or hypoenergetic balanced diets (HBD)
- 5 year outcomes across all programs:
 - Average weight loss maintenance = 3.0 kg (or 23.4 % of initial weight lost)
 - Average reduction in body weight = 3.2 % of initial body weight



Can Anyone Successfully Control Their Weight?

- Study examined distribution of successful weight loss and weight maintenance in a sample of 854 adult participants in a 3-year community-based program
 - Crawford et al. *Int J Obes.* 2000;24:1107-1110.

Can Anyone Successfully Control Their Weight? (cont.)

- **Outcomes:**
 - **53.7% of participants GAINED weight within first year**
 - **Only 24.5% avoided weight gain over 3 years**
 - **4.6% lost and maintained weight loss successfully at 3 years**

Traditional Dietary and Exercise Interventions for Weight Loss

- Review of effectiveness of traditional dietary and exercise interventions for weight loss
Miller. *Med Sci Sport Exerc.* 1999;31:1129-1134.
- Effectiveness of diet or diet/exercise programs:
Existing long-term data suggest almost complete relapse after 3-5 years



Weight Loss Methods

Diets

Body wraps

Exercise

Acupuncture

Smoking

Behavior modification

Herbals

Fasting

Purging

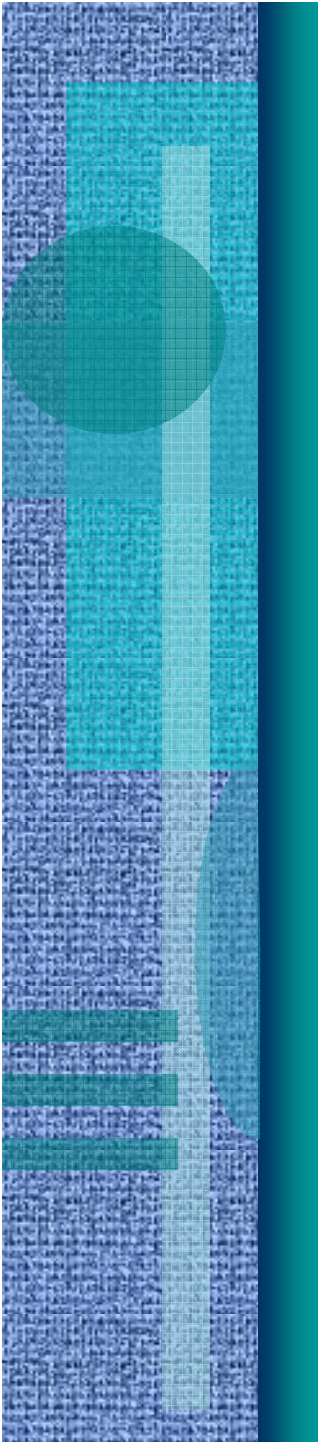
Hypnotism

Diet pills

Drugs

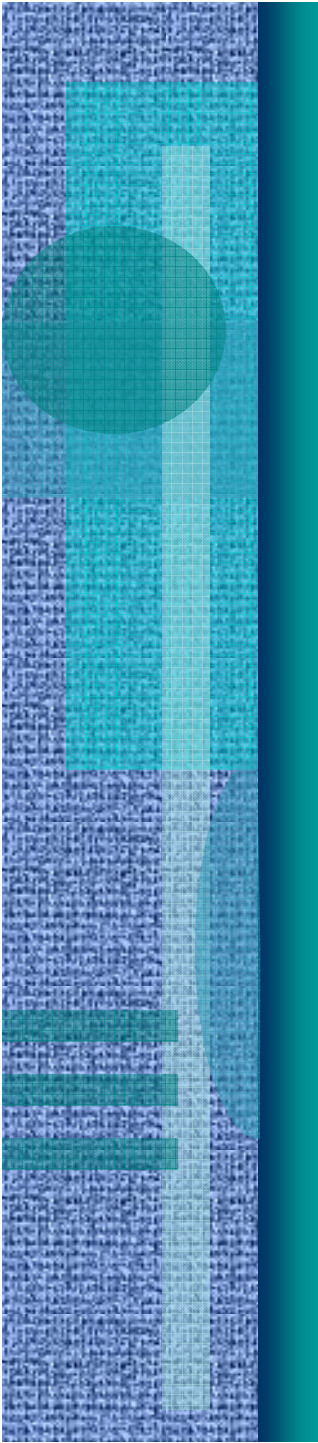
Surgery

Liposuction



**In trying to lose weight, the obese
are fighting a difficult battle.
It is a battle against biology, a
battle only the intrepid take on
and one in which only a few
prevail.**

**Friedman, Jeff. A War on Obesity, Not
the Obese. Science, February 2003**



By continuing to insinuate that weight loss is possible, are we inadvertently encouraging a lack of concern about weight with people thinking that if they gain too much weight, they can easily lose it through dieting, the use of pharmaceuticals, or with surgery?



Turning the Traditional Paradigm Around

- **OLD**

BMI should be used to categorize a person as healthy or unhealthy.

- **WHAT WE KNOW NOW**

There are much better indicators of health than BMI.

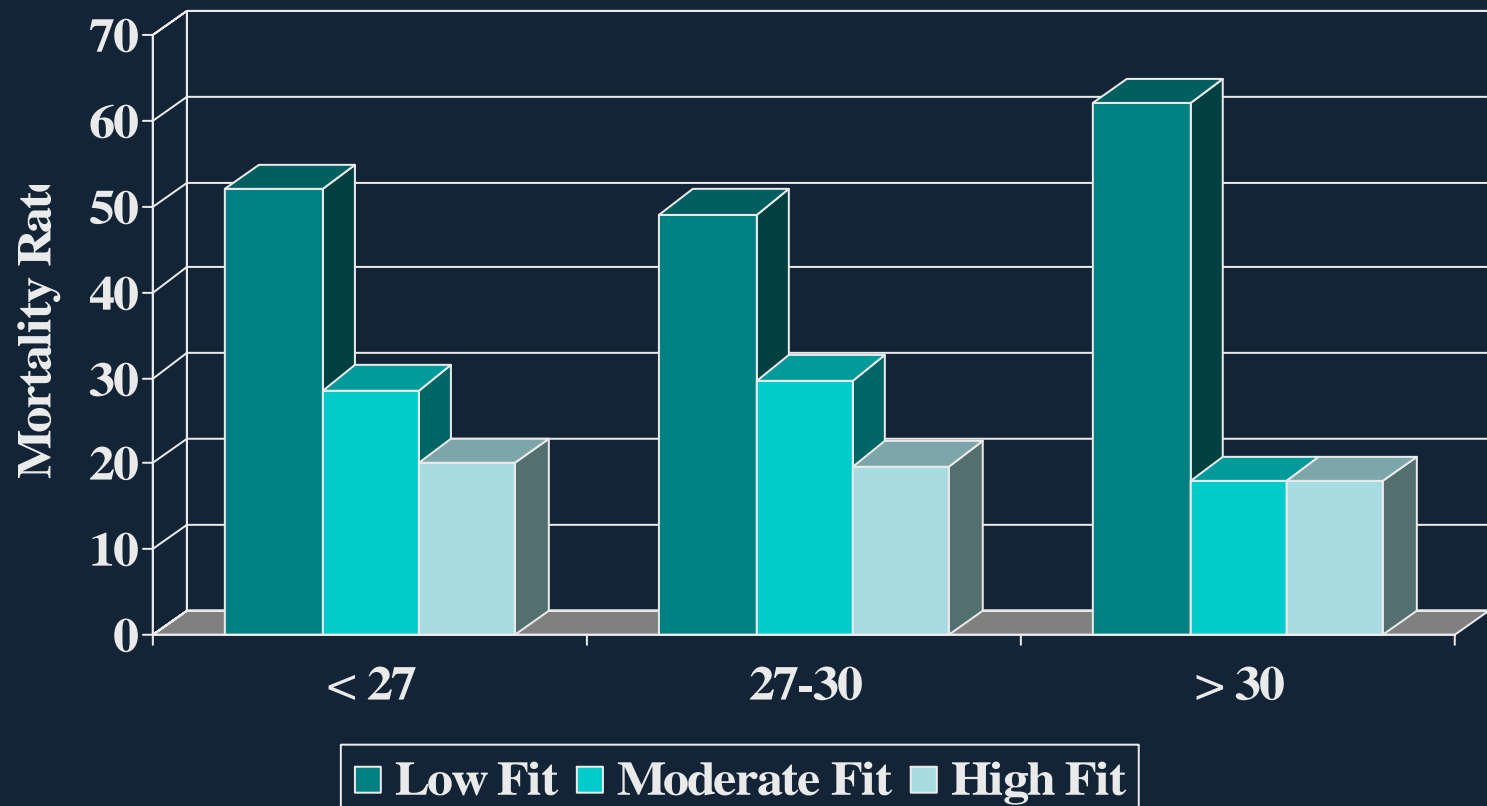
Metabolic Fitness

- Defined as “the absence of biochemical risk factors associated with obesity, such as elevated fasting concentrations of:
 -
 - cholesterol,
 - triglycerides,
 - glucose, or insulin; impaired glucose tolerance or elevated blood pressure”
- Reductions in the biochemical risk factors are not always dependent on weight loss
 - Campfield et al. *Science*. 1998.280:1383-1387.

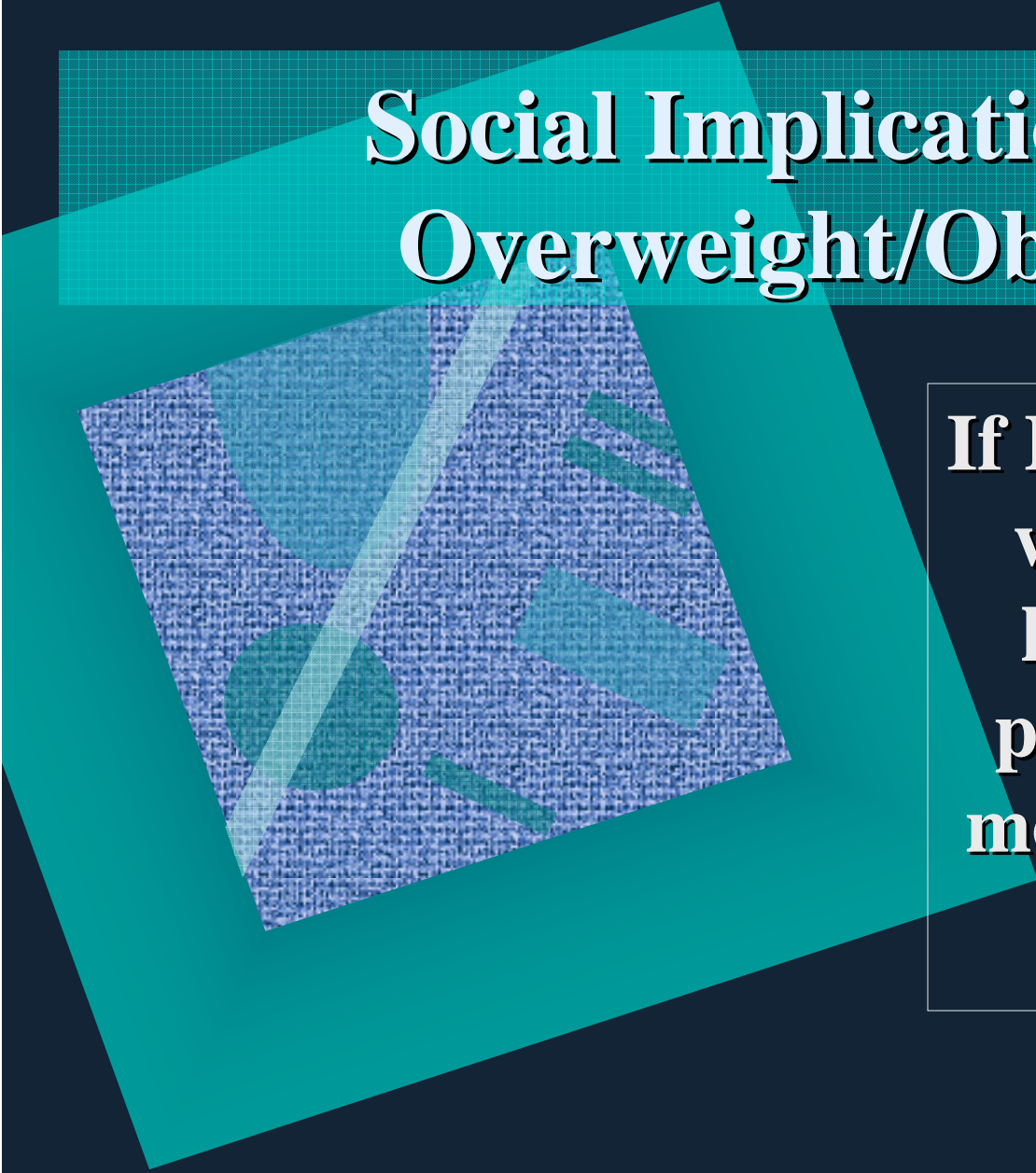
Studies of Relationships among BMI, Fitness, and Mortality

- Mortality rates lower for fit men compared with unfit men at any BMI category
 - Barlow et al. *Int J Obes.* 1995;19(Suppl 4):S41-S44.
- Cardiorespiratory fitness more important predictor of mortality in women than BMI
 - Farrell et al. *Obes Res.* 2002;10:417-423.

BMI, Fitness, and Mortality



Barlow et al. Int J Obes. 1995;19(Suppl 4):S41-S44.



Social Implications of Overweight/Obesity

**If HEALTH is the goal,
we need to consider
how the traditional
paradigm may cause
more harm than good.**



Discrimination Against Fat People Occurs in:

- Employment**
- College Admissions**
- Health Care**
- Housing**
- Adoption**
- Jury Selection**

Puhl & Brownell, Obesity Research, 2001



Health Risks of Food Restriction/Weight Loss

“ ... there is a dark side to this national preoccupation [with losing weight] ... vast amounts of money ... are wasted ... failed attempts to lose weight often bring with them guilt and self hatred ... the cure for obesity may be worse than the condition.”

NEJM 338: 52-54, 1998



Obesity-Related Attitudes of Health Professionals

- Assessed attitudes of attendees at international obesity conference
- Participants demonstrated significant pro-thin, anti-fat bias
- Endorsed stereotype of obese persons as lazy, stupid, and worthless

Schwartz et al. *Obes Res.* 2003;11:1033-1039.



Fat people are lazy.

Fat people eat too much of the
wrong kind of food.

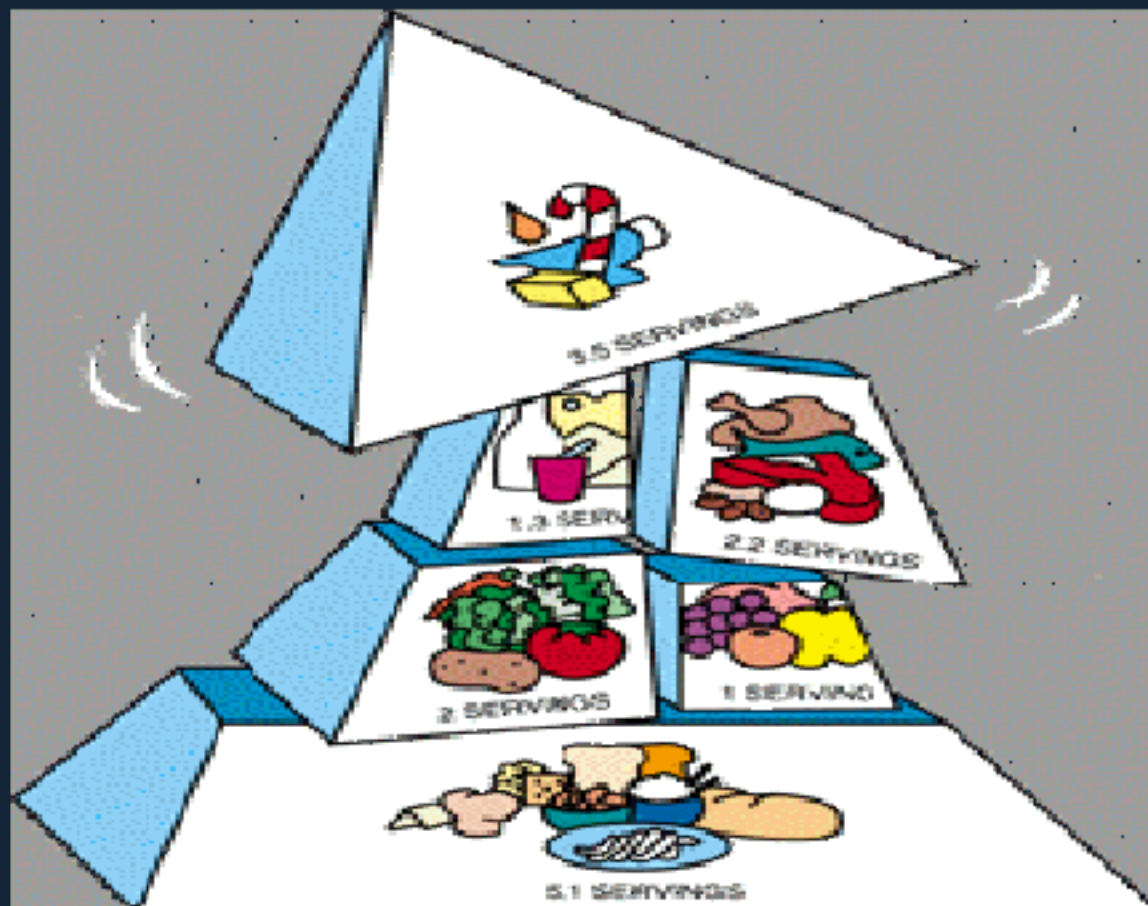
Fat people don't make any effort to
manage their weight.

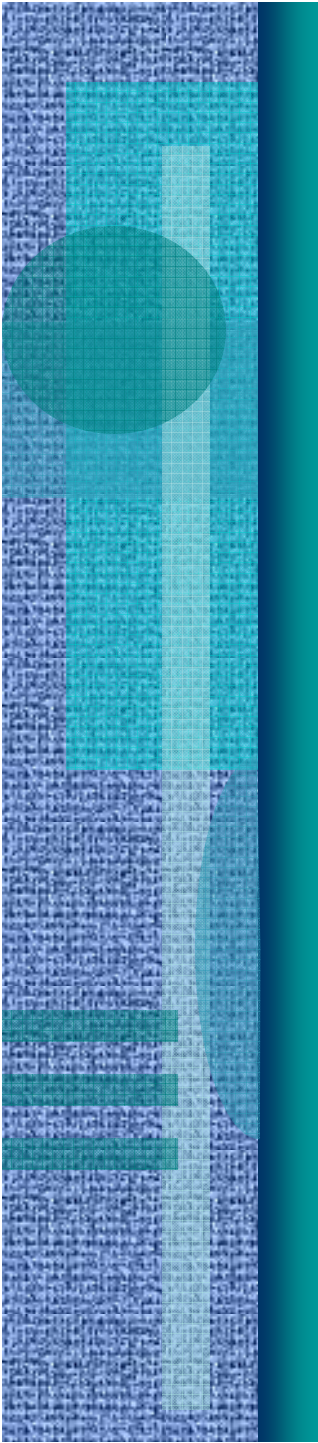
Fat people are lazy.

- “The majority of persons in the United States do not engage in physical activities consistent with the recommendation of a minimum of 30 minutes of moderate-intensity activity on most days of the week. In 2001, a total of 54.6% of persons were not active enough to meet these recommendations.”

Center for Disease Control

Fat people eat too much of the wrong kind of food





Fat people don't make any effort to manage their weight.

- **Self-Reported Dieting Experiences of Women with BMI's of 30 or more**
- **83% of women with a BMI >55 had dieted 11 or more time**
- **56% of of women with a BMI >55 had started dieting before the age of 14 years**

Ikeda, JADA, 2004



Children Are Becoming Obsessed with Having a Thin Body

How Common is Body Dissatisfaction Among US Children?

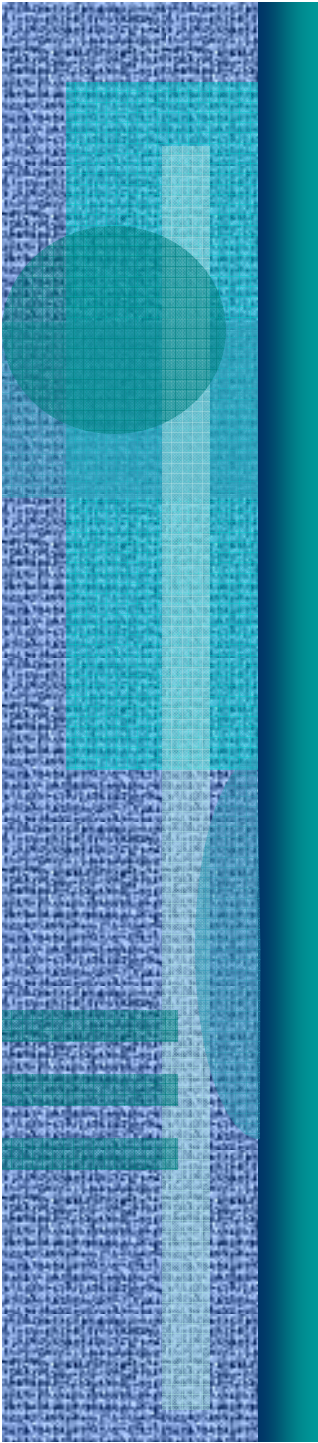
- **28 to 55% of girls want to be thinner**
- **17 to 30% of boys want to be thinner**
- **13% to 48% of boys want to be
larger/broader**

Maloney, Pediatrics, 1989



**“Body dissatisfaction
is the most consistent
predictor of the onset
of eating disturbances.”**

(Thompson, Exacting Beauty, APA, 2002)



How Common is Dieting Among Children in US?

National Study of 10,000 youngsters

- **41% of Caucasian children**
- **40% of Asian children**
- **33% of Hispanic children**
- **22% of Black children**



Does Dieting Contribute to Weight Loss?

- A Stanford study that followed 692 females from 9th through 12th grade found that increased dieting and radical weight loss efforts predicted greater subsequent growth in relative weight and increased risk of obesity.

Stice et al, J Consult Clin Psychol, 1999



“Frequent Dieting Among Youth May Increase Future Obesity Risk”

- **Study by Harvard Medical School assessed weight change of frequent dieters compared to those who never dieted.**
- **Over 10,000 youngsters ages 9 to 14 followed for 2 years.**
- **Regardless of their calories, fat, CHO, or their physical activity or inactivity, the frequent dieters were more likely to become overweight than those who never dieted.**

Field et al, Pediatrics, 2003



Health Risks of Food Restriction/Weight Loss

“Obesity has health risks. But the quest for weight loss is also a risky venture, and those risks include injury and death from dieting, weight loss, and attempted weight loss.”

Frances M. Berg, M.S.

Health Risks of Weight Loss, 3rd Ed., 1995



Physical Health Risks of Food Restriction

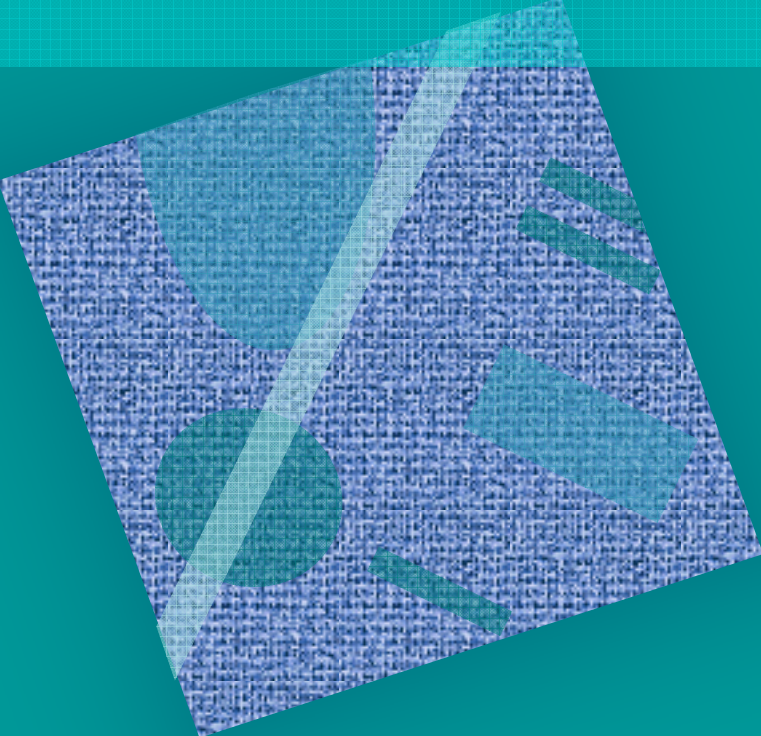
- Inadequate nutrient intake
- Anemia
- Headache
- Fatigue/weakness
- Cold intolerance
- Muscle cramps
- Amenorrhea
- Cardiac arrhythmias
- Gallstones
- High cholesterol
- Decreased sex drive
- Nausea
- Diarrhea or constipation
- Death



Psychological Risks of Chronic Dieting

- Preoccupation with food, eating, & weight
- Increased response to external vs. internal eating cues
- Mood swings
- Irritability
- Poor self-image
- Disordered eating
- Apathy/lethargy
- Narcissism
- Guilt
- Depression

Health at Every Size



An alternative
paradigm to
dieting and
weight loss.

HAES: GOAL

Improvements in metabolic indicators of fitness and decreased risk of chronic disease.

- Every individual takes personal responsibility in choosing the **BEHAVIORS** that are associated with health
- Improve the nutritional quality of the diet and increase the time spent in daily physical activity
- Keep the focus on healthy behaviors.
- Weight may or may not change.



HAES: Basic Tenets

- ▶ **Health is a state of physical, mental, and social well-being.**

Health is not defined by body size.



HAES: Basic Tenets

- **Size diversity is an inherent characteristics of human beings.**

Beautiful people come in a variety of shapes and sizes.

We celebrate size diversity as a positive characteristic of the human race.



HAES: Basic Tenets

- **There is no “ideal” body size, shape, or weight that every individual should strive to achieve.**



HAES: Basic Tenets

- **Every body is a good body . . .
whatever its size or shape, it
has the potential to be healthy.**



HAES: Basic Tenets

- **Self-esteem and body image are strongly linked.**

Helping people feel good about their bodies helps them feel good about who they are.

High self-esteem and body satisfaction provide motivation for practicing healthy behaviors.

HAES: Basic Tenets

- **Appearance stereotyping is unfair**

We want to promote a value system that promotes caring, compassion, responsibility, trust, spirituality, and balance rather than one that emphasizes external appearance and material goods.



HAES: Basic Tenets

- **We demonstrate respect for the bodies of others . . . even though they might be quite different from our own.**

It is wrong to discriminate against someone because of their body size.

HAES: Basic Tenets

- **We promote personal responsibility - each person is responsible for taking care of his/her body.**



Measures of Success

- **Diet with greater nutrient density**
- **Increased activity**
- **Enhanced self-esteem & body satisfaction**
- **Improved body image**
- **Better indicators of metabolic fitness**
 - **Blood pressure**
 - **Circulating insulin/glucose**
 - **Blood lipids**

Outcomes of Programs Based on HAES/Non-Diet Principles

**We can meet our
goals of health
without harm,
dependency, or
discrimination.**



Evaluating a Non-Diet Intervention

- Study designed to compare effects of non-diet wellness program to traditional diet program
- Randomized clinical trial with 6 month intervention
- Measures obtained at baseline, 3 months, 6 months, and 1 year

Bacon et al. *Int J Obes.* 2002;26:854-865.

Non-Diet and Traditional Diet Intervention Components

Component	Diet	Non-Diet
Caloric restriction	Yes	No
Physical activity	Yes	Yes
Body/self acceptance	No	Yes
Internal cues (hunger/satiety)	No	Yes
Counselor facilitated	Yes	Yes

Selected Outcomes of Non-Diet and Traditional Diet Interventions

Outcome	Diet	Non-Diet
Weight Change	-5.9 kg	-0.1 kg
Cholesterol	-33 mg/dl	-32 mg/dl
LDL-cholesterol	-12 mg/dl	-9 mg/dl
Triglycerides	-45 mg/dl	-41 mg/dl
Systolic BP	-8.2 mmHg	-4.5 mmHg
Dropout Rate	41%	8%

Outcomes measured at 1 year.



Non-Diet vs. Traditional Diet Interventions - Conclusions

- **Traditional diet approach resulted in weight loss at 1 year – non-diet approach did not.**
- **Otherwise, non-diet and traditional diet approach produced similar improvements in metabolic fitness, psychological factors, and eating behaviors**
- **Non-diet approach had significantly lower attrition rate compared with traditional diet approach**

Just Published!

Non-Diet vs. Traditional Diet Interventions - Conclusions

- **50% of both groups returned for two year evaluation**
- **HAES members maintained weight loss, improved in all outcome variables and sustained improvements.**
- **Diet group regained weight and did not sustain improvements.**

Bacon et al, JADA, 2005



HAES Paradigm for Obesity Treatment

“Initial results of the HAES-based paradigm show some promise in offering a more realistic and long-term approach to weight and lifestyle.”

Miller and Jacob. *Obes Rev.* 2001;2:37-45.

You may not think you can reach it.

Climb anyway.

You may not think you'll be heard.

Speak anyway.

**You may not think you can change
things.**

Try anyway.



Inspired by Maya Angelou